DUPLICATE

Caprock Educational Broadcasting
2921 Brown Trail
Suite 140
Bedford, TX 76021
(817) 498-7001

RECEIVED BY
JUL 26 1989
FCC MAIL BRANCH

Secretary of the
Federal Communications Commission
1919 M. Street N.W.
Washington, D.C. 20554

July 21, 1989

Dear Secretary,

Transmitted herewith is our application for a **Minor Modification** to our construction permit for KAMY-FM (BPED-831220AD), to operate on the assigned frequency of channel 211 in Lubbock, Texas. It has been determined that our previous application for modification of construction permit (BMPED-880328M), was inadvertently a major modification, and as such was made in error. Corrections have been made to this request for modification of construction permit and all is in order at this time. **This minor modification of construction permit is to superceed any previous modifications to the construction permit (BPED-831220AD). Please dismiss all previous request for modification immediately.**

Further, it should be noted that according to question 11, of section V-B of form 340, this proposed modification of tower site only changes the proposed area of coverage 47.4%. This is less than the 50% change constituting a major change.

If there are any further questions with regard to this minor modification please feel free to contact me at (817) 498-7001, or Mr. James L. Oyster at the following at (703) 937-4800.

Sincerely,

T. Kent Atkins

DUPLICATE

United States of America
Federal Communications Commission
Washington, D.C. 20554

Approved by OMB
3060-0034
Expires 9/30/87

APPLICATION FOR CONSTRUCTION PERMIT FOR NONCOMMERCIAL EDUCATIONAL BROADCAST STATION

For Commission Use Only
File No. BMPED-890726IF

Section V-B **FM Broadcast Engineering Data**

Name of Applicant: Caprock Educational Broadcasting

1. Purpose of authorization applied for:

☒ Construct a new station ☐ Install Auxiliary system

Change:
☒ Effective radiated power ☐ Frequency
☒ Antenna height above average terrain ☒ Transmitter location
☐ Studio location outside community of license
☐ Other (*Summarize briefly the nature of the changes proposed.*)

2. Community of license: State: Texas City or Town: Lubbock

3. Facilities requested: Frequency: 90.1 MHz Channel No.: 211 Class (Check one below): ☒ A ☐ B ☐ B1 ☐ C ☐ C1 ☐ C2 ☐ D

4. Geographic coordinates of antenna (to nearest second)

North Latitude 33° 30' 08" West Longitude 101° 52' 20"

5. Effective radiated power:

Polarization	Horizontal Plane	Maximum (Beam tilt only)
Horizontal	.20 kW	kW
Vertical	.20 kW	kW

6. Height in meters of antenna radiation center:

	Above Average terrain (HAAT)	Above Mean Sea Level	Above Ground
Horizontal	150 meters	1127.7 meters	147.7 meters
Vertical	150 meters	1127.7 meters	147.7 meters

7. Is a directional antenna being proposed? ☐ YES ☒ NO

If Yes, attach as Exhibit No. N/A an engineering statement with all data specified in Section 73.316(d) of the Commission's Rules.

8. Transmitter location: State Texas County Lubbock

City or Town: Lubbock

Street Address (*or other identification*): 9802 University Street.

9. Overall height of complete structure above ground, including all appurtenances and lighting (if any, see Part 17). 266.1 meters

10. Attach as Exhibit No. E-1 map(s) (*Sectional Aeronautical charts or equivalent*) of the area proposed to be served and shown thereon:

(a) Proposed transmitter location and the radials along which the profile graphs have been prepared;

(b) The 1mV/m predicted contour;

(c) Area (*sq. mi.*) and population (*latest census*) within 1 mV/m contour;

(d) Scale of miles or kilometers (*kilometers if available*).

11. Attach as Exhibit No. E-2 a map (*Sectional Aeronautical charts where obtainable*) showing the present and proposed 1 mV/m (60 dbu) contours.

Enter the following from Exhibit above:

Gain Area 67.25 sq. mi.
Loss Area 63.52 sq. mi.

Percent change (gain area plus loss area as percentage of present area) 47.4 %.
If 50% or more this constitutes a major change. Indicate in question 2(e), Section I, accordingly. Minor Modification

12. If the main studio will not be within the boundaries of the principal community to be served, attach as Exhibit No. N/A a justification pursuant to Section 73.1125(f) of the Commission's Rules.

13. Attach as Exhibit No. E-3 map(s) (*7.5 minute U.S. Geographic Survey topographic quadrangles if available*) of the proposed antenna location showing the following information:

(a) Proposed transmitter location accurately plotted with the latitude, the longitude lines clearly marked and showing a scale of statute kilometers.

(b) Transmitter location and call letters of all AM broadcast stations within 2 miles of the proposed antenna location.

14. If there are any FM or TV stations within 200 feet of proposed antenna or non-broadcast radio stations (*except amateur and citizens band*), or established commercial and government receiving stations in the general vicinity which may be adversely affected by the proposed operation, attach as Exhibit No. E-4 the expected effect, a description of remedial steps that may be pursued if necessary, and a statement from the applicant accepting full responsibility for the elimination of any objectionable effect on existing stations.

15. Tabulation of Terrain Data. *(Calculated in accordance with the procedure prescribed in Section 73.313 of the Commission's Rules utilizing 7.5 minute topographic maps, if available.)*

Radial bearing *(degrees true)*	Height of antenna, radiation center above average elevation of radial (3-16 kilometers) Meters	Predicted Distance To the 1 mV/m contour Kilometers
0°	Exhibit E-5	
45°		
90°		
135°		
180°		
225°		
270°		
315°		

Allocation Studies

(See Subpart C of Part 73 of the Commission's Rules and Regulations)

16. Is the proposed antenna location within 320 kilometers (199 miles) of the common border between the United States and Mexico?

☐ Yes ☒ No

If Yes, attach as Exhibit No. N/A a showing of compliance with all provisions of the Agreement between the United States of America and the United Mexican States concerning Frequency Modulation Broadcasting in the 88 to 108 MHz band.

17. With regard to stations within 320 kilometers (199 miles) of the common border between the United States and Mexico, attach as Exhibit No. N/A information required in 1/.

18. If the proposed operation is for a channel in the range from channel 201 through 220 (88.1 through 91.9 MHz), then with regard to stations more than 320 kilometers (199 miles) from the common border between the United States and Mexico or if this proposed operation is for a class D station in the range from Channel 221 through 300 (92.1 through 107.9 MHz), attach as Exhibit No. E-6 a complete allocation study to establish the lack of prohibited overlap of contours involving these stations. The allocation study should include the following:

(a) The normally protected interference-free and the interfering contours for the proposed operation along all azimuths.
(b) Complete normally protected interference-free contours of all other proposals and existing stations to which objectionable interference would be caused.
(c) Interfering contours over pertinent arcs of all other proposals and existing stations from which objectionable interference would be received.
(d) Normally protected and interfering contours over pertinent arcs, of all other proposals and existing stations, which require study to show the absence of objectionable interference.
(e) Plot of the transmitter location of each station or proposal requiring investigation, with identifying call letters, file numbers and operating or proposed facilities.
(f) When necessary to show more detail, an additional allocation study will be attached utilizing a map with a larger scale to clearly show interference or absence thereof.
(g) A scale of miles and properly labeled longitude and latitude lines, shown across the entire (Exhibit(s). Sufficient lines should be shown so that the location of the sites may be verified.
(h) The name of the map(s) used in the exhibit(s).

1/ A showing that the proposed operation meets the minimum distance separation requirements. If any separations are proposed that are less than the applicable minimum separation requirements plus 15 kilometers, include these stations. Also include existing stations, proposed stations, and cities which appear in the Table of Assignments; the location and geographic coordinates of each antenna, proposed antenna or reference point, as appropriate; and distance to each from proposed antenna location.

19. Is the proposed antenna location within 320 kilometers of the common border between the United States and Canada? ☐ Yes ☒ No

If Yes, attach as Exhibit No. N/A a showing of compliance with all provisions of the Working Agreement for Allocation of FM Broadcasting Stations on Channels 201-300 under The Canada-United States FM Agreement of 1947.

20. With regard to station separated by 53 or 54 channels (10.6 or 10.8 MHz) attach as Exhibit No E-7 information required in 1/*(separation requirements involving intermediate frequency [i.f.] interference).*

21. Is the proposed operation on Channel 218, 219 or 220? ☐ Yes ☒ No

If Yes, attach as Exhibit No. N/A information required in 1/ regarding separation requirements with respect to stations on Channels 221, 222, and 223.

22. Is the proposed station for a channel in the range from Channel 201 to 221 (88.1-91.9 MHz) and the proposed antenna location within the Grade B contour of a channel 6 television station or sufficiently near the Grade B contour that a question of interference to channel 6 may be raised? ☐ Yes ☒ No

If Yes, attach as Exhibit No N/A a map showing the Grade B contour of the television station and the proposed antenna location. Also include discussion of the possibility of interference to the Channel 6 station and the steps proposed to remedy any interference which may occur.

23. Is the proposed station for a channel in the range from Channel 221 to 300 (92.1-107.9 MHz)? ☐ Yes ☒ No

If Yes, attach as Exhibit No. N/A information required in 1/ *(Except for class D [secondary] proposals.)*

24. If the proposed antenna location is in or near a populated area, attach Exhibit No N/A a discussion of blanketing and the steps proposed to remedy any interference which may occur.

25. Environmental Statement, See Part I, Subpart 1 of the Commission's Rules.

Would a Commission grant of this application be a major action as defined by Section 1.1305 of the Commission's Rules? ☐ Yes ☒ No

If Yes, attach as Exhibit No. N/A a narrative statement in accordance with Section 1.1311 of the Commission's Rules.

If No, explain briefly.

I certify that I represent the applicant in the capacity indicated below and that I have examined the foregoing statement of technical information and that it is true to the best of my knowledge and belief.

July 20, 1989
Date

T. Kent Atkins
Name

T. Kent Atkins
Signature *(check appropriate box below)*

2921 Brown Trail Suite 140
Address *(include ZIP Code)*

Bedford, TX 76021

(817) 498-7001
Telephone No. *(include Area Code)*

☒ Technical Director ☐ Registered Professional Engineer ☐ Chief Operator

☐ Technical Consultant ☐ Other *(Specify)*

Section V-G **Antenna and Site Information**

Name of Applicant	Call Sign	Station Location
Caprock Educational Broadcasting	KAMY	Lubbock Texas

Purpose of Application (Put "X" in appropriate box)

- ☐ New antenna construction
- ☐ Alteration of existing antenna structure
- ☒ Change in location

Facilities Requested

Side Mounted on an existing tower

1. Location of Antenna:

State	County	City or Town
Texas	Lubbock	Lubbock

Exact antenna location (*street address*). If outside city limits, give name of nearest town and distance and direction of antenna from town.

9801 University Street

Geographical coordinates (*to nearest second*). For directional antenna give coordinates of center of array. For single vertical radiator give tower location.

North Latitude 33° 30' 08" West Longitude 101° 52' 20"

2. Is the proposed site the same transmitter-antenna site of other stations authorized by the Commission or specified in another application pending before the Commission? ☒ YES ☐ NO

If Yes, give call sign: KJTV-TV

3. Has the FAA been notified of proposed construction? ☐ YES ☒ NO
If Yes, give date and office where notice was filed.

4. List all landing areas within 5 miles of antenna site. Give distance and direction to the nearest boundary of each landing area from the antenna site.

	Landing Area	Distance	Direction
(a)	None		
(b)			
(c)			

5. Attach as Exhibit No. See below a description of the antenna system, including whether tower(s) are self-supporting or guyed. If a directional antenna, give spacing and orientation of towers. Antenna will be side mounted on an existing tower. This tower is uniform steel, guyed.

Tower		#1	#2	#3	#4	#5	#6
Overall height above ground (include obstruction lighting)	meters	266.1					
	feet	873.0					
Overall height above mean sea level (include obstruction lighting)	meters	1246.0					
	feet	4088.0					

6. Attach as Exhibit No. E-6 a vertical plan sketch for the proposed total structure (including supporting building, if any) giving heights above ground in feet and meters for all significant features. Clearly indicate existing portions, noting lighting, and distinguish between the skeletal or other main supporting structure and the antenna elements.

I certify that I represent the applicant in the capacity indicated below and that I have examined the foregoing statement of technical information and that it is true to the best of my knowledge and belief.

T. Kent Atkins
Name

T. Kent Atkins
Signature (*Check appropriate box below*)

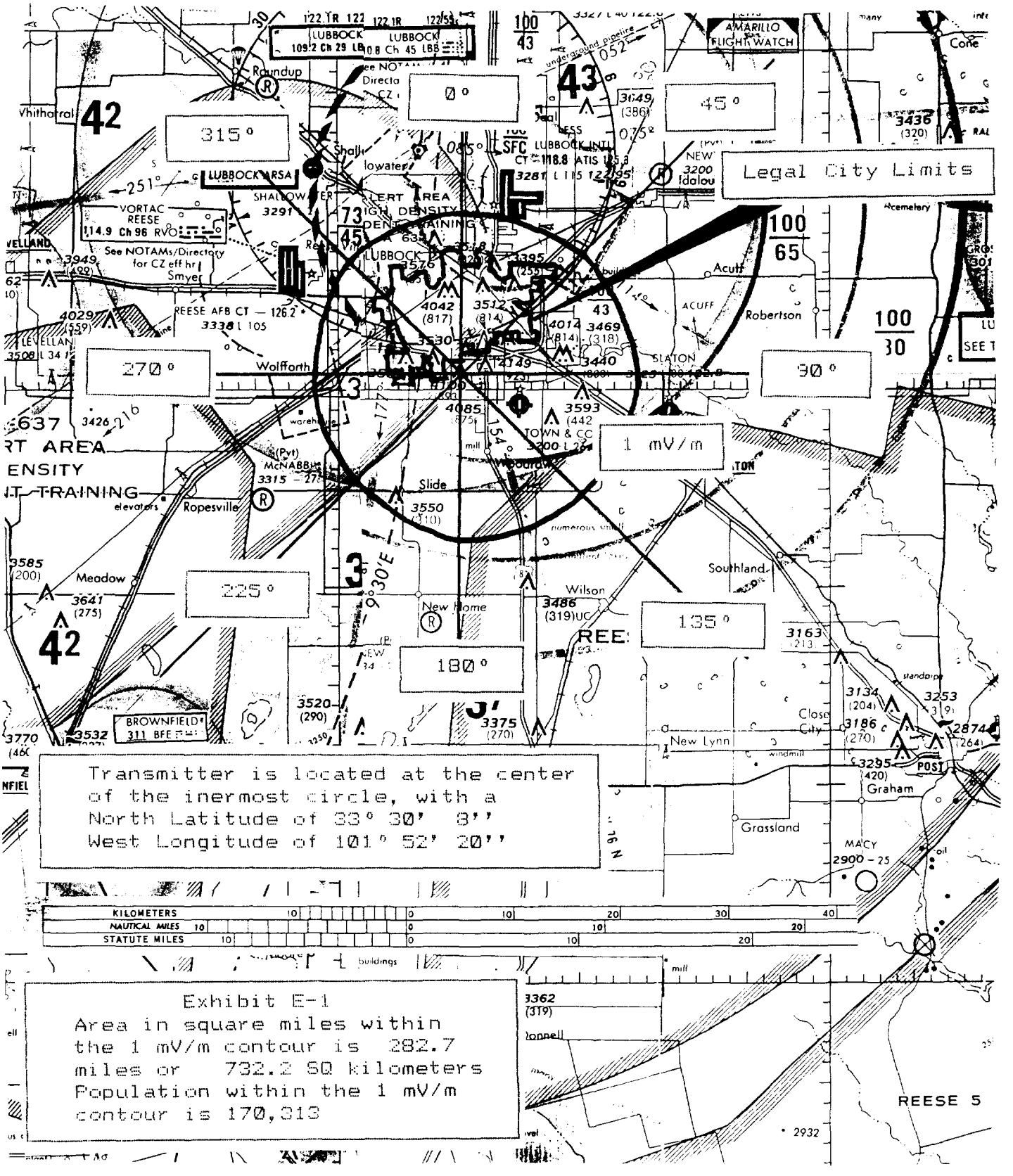
2921 Brown Trail, Suite 140
Address (*include ZIP Code*)

Bedford, TX 76021

(817) 498-7001
Telephone No. (*Include Area Code*)

☒ Technical Director ☐ Registered Professional Engineer ☐ Other (*specify*)

☐ Technical Consultant ☐ Chief Operator


Legal City Limits
1 mV/m
315°
045°
135°
180°
225°
270°
090°
Transmitter is located at the center of the inermost circle, with a North Latitude of 33° 30' 8'' West Longitude of 101° 52' 20''
KILOMETERS
NAUTICAL MILES
STATUTE MILES
Exhibit E-1
Area in square miles within the 1 mV/m contour is 282.7 miles or 732.250 kilometers
Population within the 1 mV/m contour is 170,313
REESE 5

JUL 20 1989

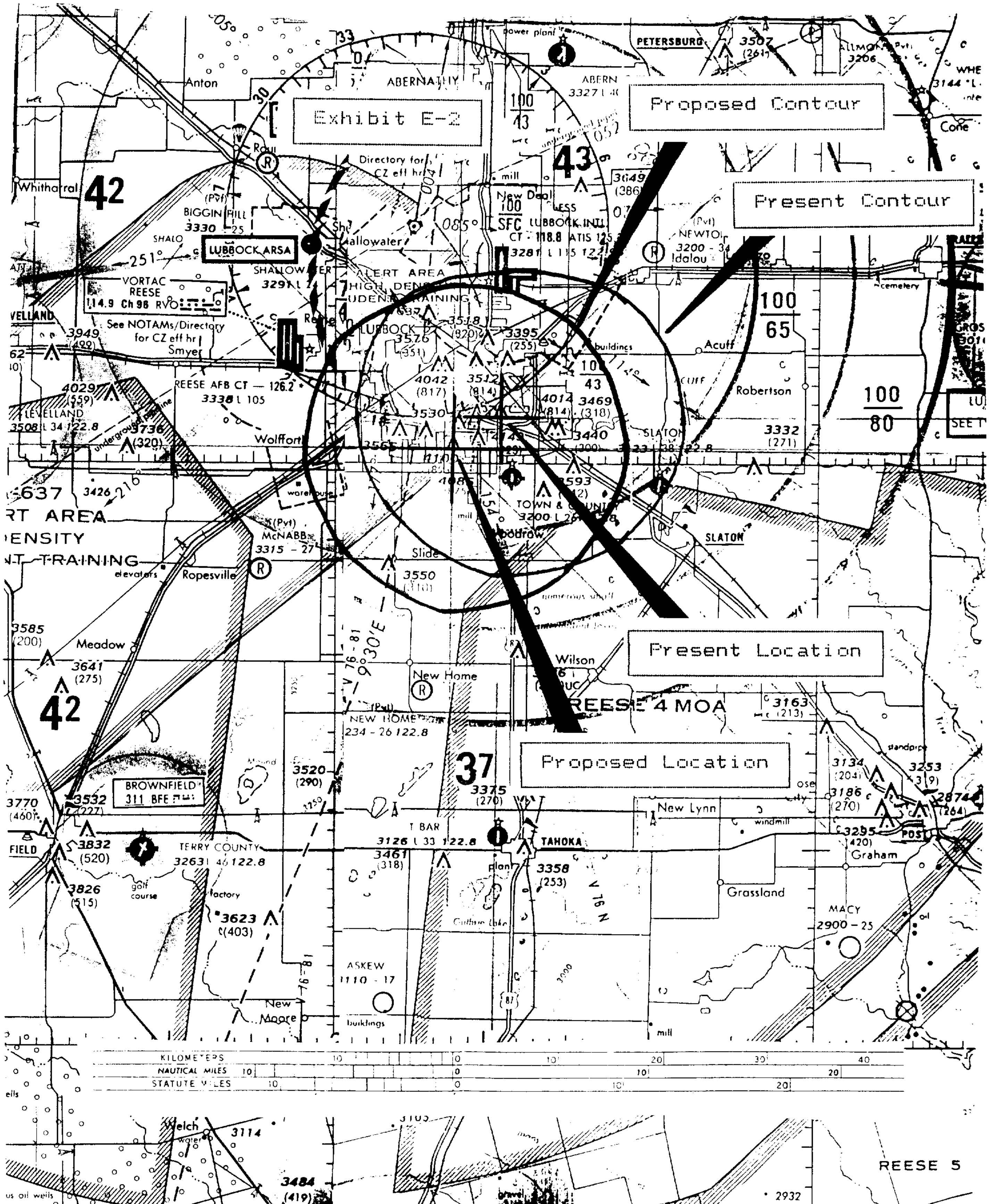
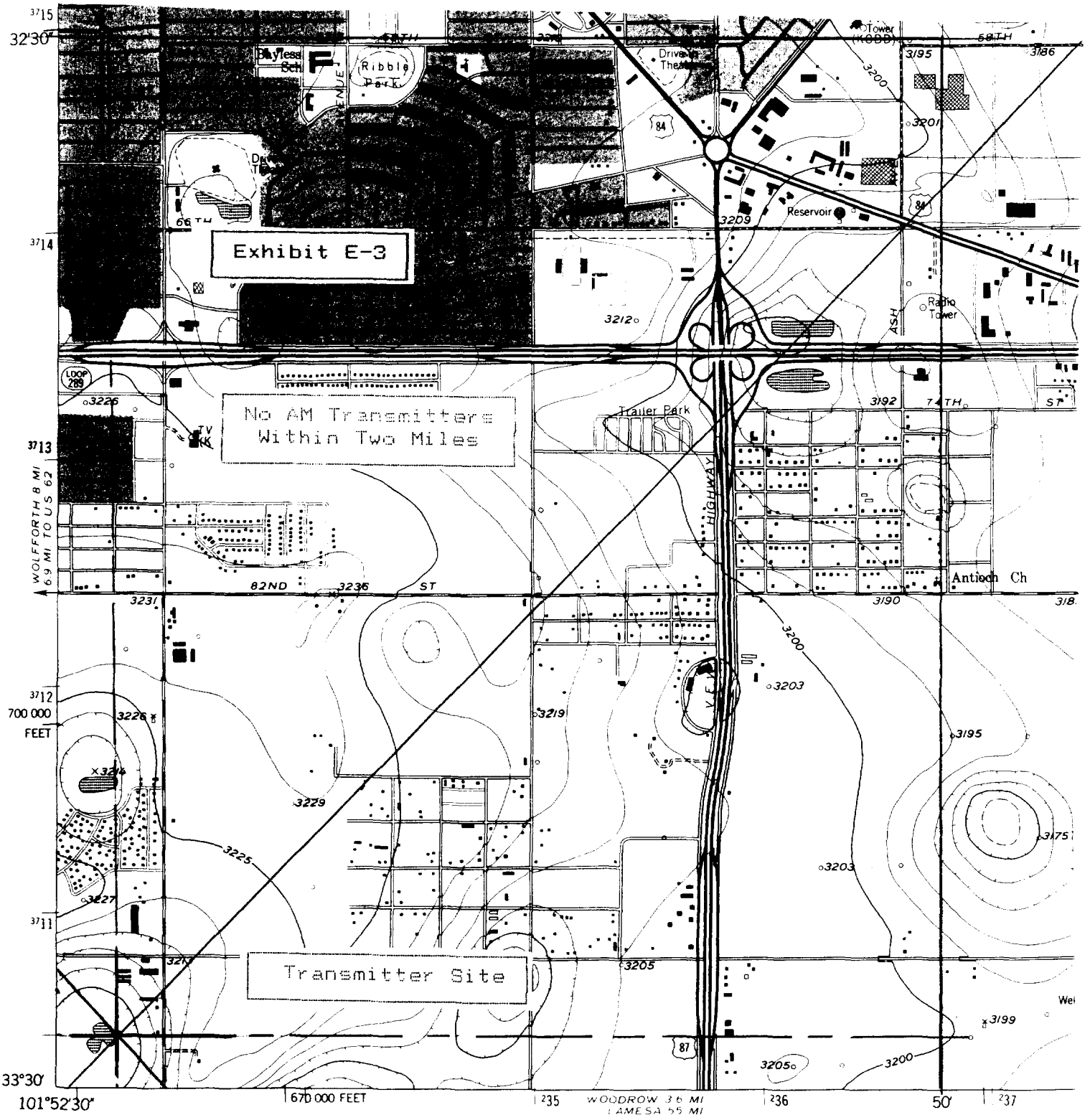


Exhibit E-2
Proposed Contour
Present Contour
Present Location
Proposed Location
LUBBOCK ARSA
REESE 4 MOA
BROWNFIELD
TAHOKA
SLATON
PETERSBURG
ABERNATHY
Wolfforth
Ropesville
New Home
Wilson
New Lynn
Grassland
Graham
Robertson
Acuff
Idalou
Anton
Whitharral
Meadow
KILOMETERS
NAUTICAL MILES
STATUTE MILES
REESE 5



Mapped, edited, and published by the Geological Survey

Control by USGS and NOS/NOAA

Culture and drainage in part compiled from aerial photographs taken 1954. Topography from planetable surveys 1957

Polyconic projection. 1927 North American datum
10,000-foot grid based on Texas coordinate system, north central zone
1000-meter Uni zone 14, shown

Red tint indicate landmark buildir

Revisions shown taken 1970 and Purple tint indica

JUL 20 1989

LUBBOCK EAST, TEX.

SE/4 LUBBOCK 15' QUADRANGLE
N3330—W10145/7.5
1957
PHOTOREVISED 1970 AND 1975
AMS 5651 III SE -SERIES V882

SCALE 1:24 000

1 0 1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 .5 0 1 KILOMETRE

CONTOUR INTERVAL 5 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

FOR SALE

Exhibit E-4

This Applicant has determined that there will be virtually no blanketing at the proposed tower site. The immediate area is a commercially zoned area, and as such is sparsely populated. In addition the transmitter site has been used for both a UHF television and FM broadcast site for the past five years without any blanketing problems.

Should any blanketing interference occur the Applicant will purchase any filters or take other such steps necessary to remedy the problem.

The Applicant assumes full responsibility for any such problems should they arise.

July 19, 1989

Exhibit E-5

Section V-B, 15 Of FCC Form 340

Caprock Educational Broadcasting

Lubbock Texas

Channel 211 Class A

Bearing	Average Terrain Radial (ft/mt)	Radiation Center A.A.T. (ft/mt)	3.16 mV/m (70 dBu) (mi/km)	1 mV/m (60 dBu) (mi/km)
0	3200.0/ 975.4	499.6/ 152.3	5.2/ 8.3	9.6/ 15.4
45	3152.2/ 960.8	547.4/ 166.9	5.5/ 8.8	10.0/ 16.0
90	3141.5/ 957.5	558.1/ 170.1	5.6/ 9.0	10.1/ 16.2
135	3165.0/ 964.7	534.6/ 163.0	5.4/ 8.6	9.9/ 15.8
180	3200.7/ 975.6	498.9/ 152.1	5.2/ 8.3	9.6/ 15.4
225	3271.2/ 997.1	428.4/ 130.6	4.8/ 7.7	8.8/ 14.1
270	3286.7/1001.8	412.9/ 125.9	4.7/ 7.5	8.7/ 13.9
315	3243.9/ 988.7	455.8/ 138.9	5.0/ 8.0	9.1/ 14.6

The Center Of Radiation Above Mean Sea Level is 3699.6 Feet or 1127.7 Meters

The Average Terrain Elevation is 3207.6 Feet or 977.7 Meters

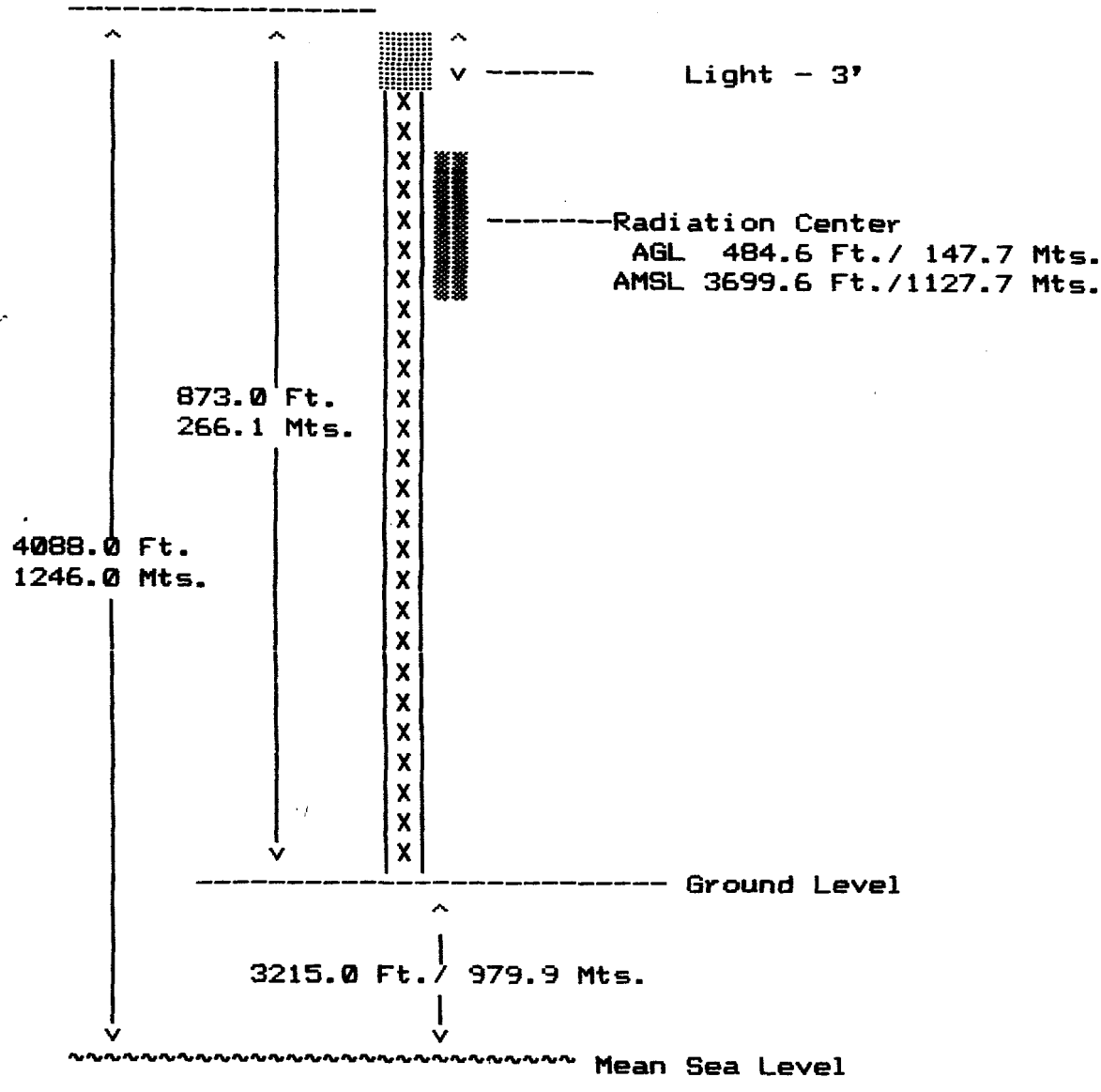
The Radiation Center Above Average Terrain (HAAT) is 492.0 Feet or 150.0 Meters

The Area Within the 1 mV/m Contour is 282.7 Miles or 732.2 Kilometers

July 19, 1989

Exhibit E-6

Vertical Plan Sketch of Total Structure Channel 211 Class A



NOTE : NOT TO SCALE

Element Depictions are Purely Symbolic

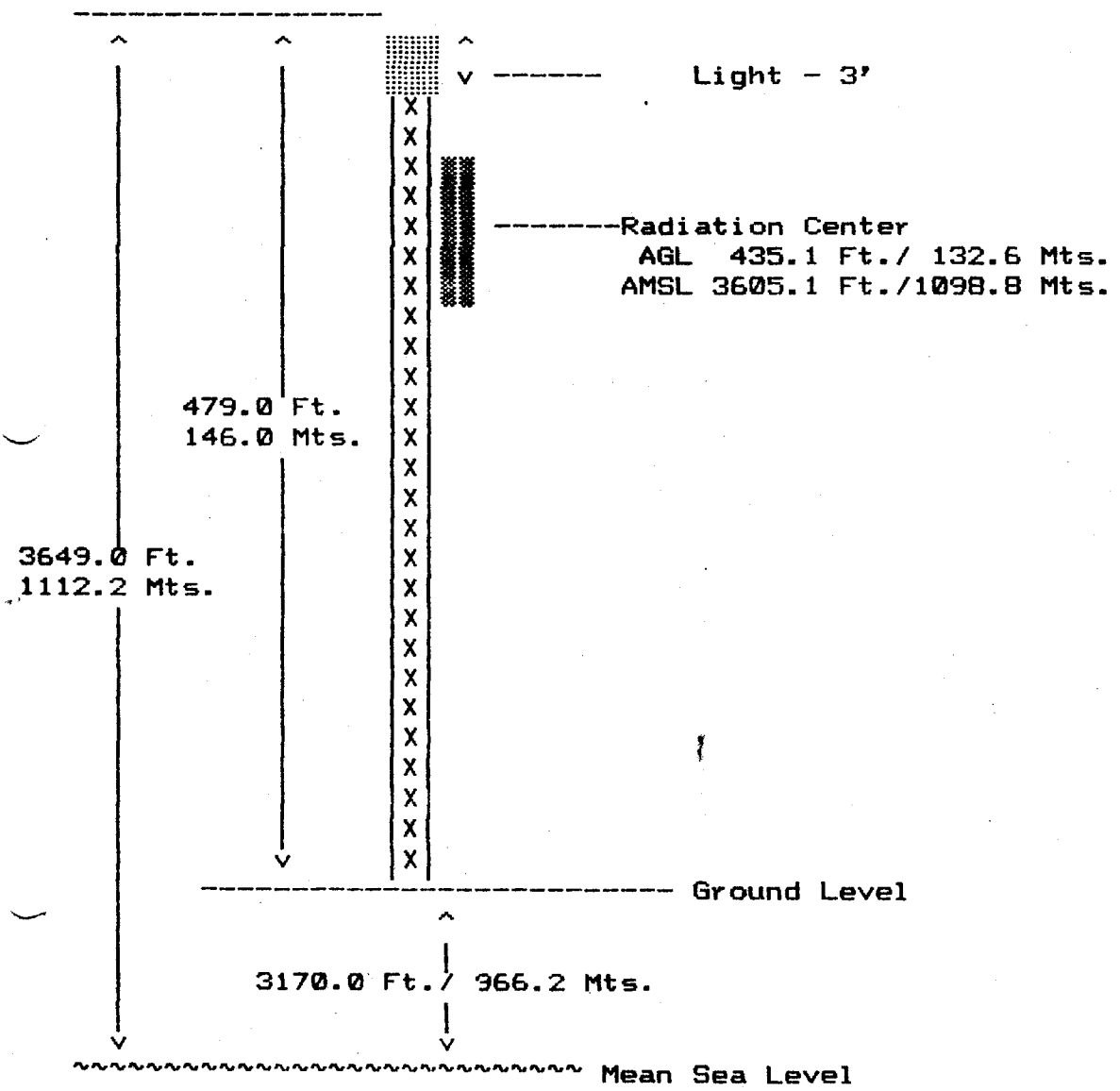
Shively Laboraties FM Antenna Model 6810
8 Bays - Power Gain 4.4 (6.43 db)
Vertical Apperture 77 Feet

Lubbock Texas
Caprock Educational Broadcasting

March 22, 1988

Exhibit E-8

Vertical Plan Sketch of Total Structure Channel 211 Class A



NOTE : NOT TO SCALE

Element Depictions are Purely Symbolic

Shively Laboraties FM Antenna Model 6810
8 Bays - Power Gain 4.4 (6.43 db)
Vertical Apperture 77 Feet

Lubbock Texas
Caprock Educational Broadcasting